

AMENDMENTS TO THE CLAIMS

Please cancel claim 12, amend claims 11 and 13-29, and add new claims 30-31, in accordance with the following list of claims:

1-10. (Canceled)

11. (Currently Amended) An image ~~forming~~ developing apparatus comprising:
a first electricity source;
a second electricity source;
an image density detecting means for detecting image density from image data for an image being developed at the present time;
a controller for controlling each of said first electricity source and said second electricity source so that a difference between a first voltage provided by said first electricity source and a second voltage provided by said second electricity source becomes larger as said image density detected by said image density detecting means increases and becomes smaller as said image density detected by said image density detecting means decreases;
a developing means impressed with said first voltage provided by said first electricity source; and
a developing material supplying means impressed with said second voltage provided by said second electricity source, supplying developing material to said developing means,
wherein said controller, after controlling each of said first electricity source and said second electricity source according to said image density, causes said developing material to be transferred onto an image holder ~~of said developing means~~, so as to form said image being developed.

12. (Canceled)

13. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 11, wherein said controller controls electric potential difference between said first voltage

and said second voltage according to said image density detected by said image density detecting means.

14. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 11 further comprising:

a limiting means for toner, which limits a thickness of toner layer formed on the surface of developing means,

wherein said first electricity source impresses said limiting means for toner, with said first voltage.

15. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 11 further comprising:

an operation amount detecting means of detecting an amount of operation,

wherein said controller controls each of said first electricity source and said second electricity source according to said amount of operation and said image density.

16. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 15, wherein said operation amount detecting means detects said amount of operation according to a measured number of revolutions of said image holder ~~of said developing means~~.

17. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 15, wherein said controller decreases electric potential difference between said first electricity source and said second electricity source as said amount of operation increases in the case when said image density is near 0%.

18. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 15, wherein said controller increases electric potential difference between said first electricity source and said second electricity source as said amount of operation increases in the case when said image density is near 100%.

19. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 11 wherein said controller calculates an average image density between the last time of toner tank replacement and the present time, from records stored in a memory of image density detected by said image density detecting means, so as to control each of said electricity sources according to said average image density.

20. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 19 wherein said controller controls the difference between the first voltage and the second voltage to increase more in the case of low average image density than in the case of high average image density.

21. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 11 further comprising
an environmental condition detecting means of detecting environmental conditions surrounding the apparatus in operation,
wherein said controller corrects each of said first and second electricity sources according to said environmental conditions.

22. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 21 wherein said controller controls the difference between the first voltage and the second voltage to increase more in the case of high temperature and high humidity than in the case of low temperature and low humidity of said environmental conditions.

23. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 11 further comprising:
a surface temperature detecting means for detecting surface temperature of said image holder ~~of said developing means~~,
wherein said controller calculates average printing temperature from records stored in a memory of surface temperature detected by said surface temperature detecting means; so as to correct each of said electricity sources according to said average printing temperature.

24. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 23 wherein said controller controls the difference between the first voltage and the second voltage to increase more in the case of high temperature than in the case of low temperature of average surface temperature of said image holder ~~of said developing means~~.

25. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 23 further comprising:
a presenting means for presenting a prescribed message,
wherein said controller informs a user of said image ~~forming~~ developing apparatus by presenting said prescribed message at said presenting means when said average printing temperature exceeds a prescribed temperature.

26. (Currently Amended) An image ~~forming~~ developing apparatus comprising:
a developing means for putting developing material to be transferred onto an image holder ~~of said developing means~~, so as to form an image corresponding to image data;
a developing material supplying means for supplying said developing material to said developing means;
a first electricity source for impressing said developing means with a first voltage;
a second electricity source for impressing said developing material supplying means with a second voltage having a same polarity as said first voltage and having a larger magnitude than said first voltage;
a first memory to store a first setting value being set according to an image density setting condition;
a second memory to store a plurality of values of difference between said first voltage and said second voltage corresponding to a plurality of different apparatus states;
and
a controller for controlling said first electricity source according to said first setting value and controlling said second electricity source according to the sum of the one of said plurality of difference values corresponding to the present apparatus state, read out from said second memory, and said first setting value read out from said first memory.

27. (Currently Amended) An image ~~forming~~ developing apparatus comprising:
a developing means for putting developing material to be transferred onto an image holder ~~of said developing means~~, so as to form an image corresponding to image data,
a developing material supplying means for supplying said developing material to said developing means;
a first electricity source for impressing said developing means with a first voltage;
a second electricity source for impressing said developing material supplying means with a second voltage;
an operation amount detecting means for detecting an amount of operation with respect to images previously developed; and
a controller for controlling the electric potential difference between said first electricity source and said second electricity source according to said amount of operation.

28. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 27, wherein said operation amount detecting means detects said amount of operation according to a measured number of revolutions of said image holder ~~of said developing means~~.

29. (Currently Amended) An image ~~forming~~ developing apparatus according to Claim 27 wherein said operation amount detecting means detects said amount of operation between the last time of toner tank replacement and the present time.

30. (New) An image forming apparatus comprising:
a first electricity source;
a second electricity source;
an image density detecting means for detecting image density from image data for an image being formed at the present time;
a controller for controlling each of said first electricity source and said second electricity source so that a difference between a first voltage provided by said first electricity source and a second voltage provided by said second electricity source becomes

larger as said image density detected by said image density detecting means increases and becomes smaller as said image density detected by said image density detecting means decreases;

a developing means impressed with said first voltage provided by said first electricity source;

a developing material supplying means impressed with said second voltage provided by said second electricity source, supplying developing material to said developing means; and

an image forming means including an image holder for forming an electro-static latent image, to which said developing material is transferred by said developing means,

wherein said controller, after controlling each of said first electricity source and said second electricity source according to said image density, causes said developing material to be transferred onto said image holder, so as to develop said image being formed.

31. (New) An image forming apparatus according to Claim 30, further comprising:

a charging means for charging said image holder; and

an exposing means for exposing said image holder to light based on the image data to form said electro-static latent image.